

HEPATIC TANAGER

Piranga flava

Authors: Kimball L. Garrett and Kathy C. Molina; Section of Vertebrates, Natural History Museum of Los Angeles County, 900 Exposition Blvd., Los Angeles, CA 90007.

Management Status: Federal: None

California: Species of Special Concern (CDFG, 1998)

General Distribution:

Hepatic Tanagers breed from eastern California, southern Nevada, northwestern and central Arizona, western Colorado, northern New Mexico and far western Texas south over a vast portion of the Neotropics (AOU, 1983). Birds breeding north of Costa Rica are sometimes considered a separate species, *P. hepatica* (AOU, 1983). The northernmost populations are migratory, not normally wintering north of Mexico.

This species (subspecies *P. f. hepatica*) is scarce and local as a breeding bird in California, being at the extreme northwest of the species' range. Breeding was first documented in the upper Arrastre Creek drainage of the eastern San Bernardino Mountains in 1972, but territorial birds had been there continuously since 1967 (Johnson and Garrett, 1974). One or more pairs have been present on Clark Mountain in northeastern San Bernardino County since 1973 (Johnson and Garrett, 1974). Up to three pairs were noted in the Kingston Range in 1977 and one pair was in the New York Mountains in the same year (Remsen, 1978; Garrett and Dunn, 1981). Birds are thought to arrive on the breeding grounds in late April or early May, and depart by the end of August (Garrett and Dunn, 1974).

There are several records of wintering Hepatic Tanagers on the coastal slope of southern California, but most of the few winter records for the deserts are from the Colorado River Valley. This species is rarely recorded as a migrant away from breeding and wintering areas in California and elsewhere (Garrett and Dunn, 1981; Monson and Phillips 1981).

Distribution in the West Mojave Planning Area:

Hepatic Tanagers do not breed in the WMPA, although a few pairs have been documented breeding just outside the periphery of the area (see above). The upper Arrastre Creek drainage nesting sites are about 4.5 mi. (7.2 km) south of the northern boundary of the San Bernardino National Forest. A female was seen on 8 June 1985 in Lower Shake Canyon, west of Lake Hughes, Los Angeles County; this sighting was only 0.25 mi. (0.5 km) inside the northern boundary of the Angeles National Forest, and thus just outside the WMPA.

Garrett and Dunn (1981) cited the following records for single birds in the WMPA: Morongo Valley on 13 October 1992, 19 April 1977 and 1 October 1977; and one in Afton Canyon on 8 June 1977. We are not aware of additional records of migrants in the WMPA since then; there are no records of this species the Mojave Desert portions of Inyo, Kern, or Los Angeles counties.

Natural History:

Hepatic Tanagers are medium sized (7 in; 18 cm) insectivorous and frugivorous songbirds with moderately heavy bills. Males are mostly red, tinged with gray or dusky on the back, wings, tail, and flanks. The cheeks are dusky, contrasting with the bright red or orange-red throat and breast. Females are olive gray above, and yellowish below, brightest on the throat, upper breast and undertail coverts; their flanks are washed with dusky-gray. Wingbars are lacking. All birds have blackish bills, unlike the distinctive pale bills of Summer Tanagers (the species with which they are most often confused). Male Summer Tanagers are much brighter red than Hepatics. The common call note of a Hepatic Tanager is a single, wooden "chup", unlike the more complex "chicky-chup" or "chick-a-tup" of Summer Tanager. Hepatic

Tanagers feed by gleaning foliage of broadleafed trees and pines, usually high in the tree crowns; they sometimes capture flying insects in the air. They also visit fruiting shrubs. Food items include insects, nectar, fruits and berries. Isler and Isler (1987) summarize foraging behavior and diet.

On the breeding grounds Hepatic Tanagers are most often found in pairs; all records of transients in the WMPA are of single individuals. Breeding pairs are strongly territorial (Marshall, 1957). No data on territory size are available, but in ideal pine-oak habitat in southeastern Arizona and northwestern Mexico up to "six or seven" territorial males can be heard singing from the same observation point (Marshall 1957); densities in marginal habitat in arid montane forests of southern California are undoubtedly much lower. The nest is a loose cup placed near the end of a horizontal branch at medium or high levels in oaks, pines, or other trees; egg dates within the United States are from May to July (Isler and Isler, 1987).

Habitat Requirements:

The most commonly occupied breeding habitat is mixed montane woodland of pines and oaks. However, the limited populations in California have been in arid conifer woodlands with few or no oaks. In the San Bernardino Mountains they have nested in a mixture of Jeffrey pines (*Pinus jeffreyi*) and singleleaf pinyons (*P. monophylla*) along an intermittent stream with willows (*Salix* spp.) at 6700 ft (2045 m; Johnson and Garrett, 1974). Birds on the desert ranges of the East Mojave have nested in habitats dominated by singleleaf pinyons, mixed with white firs (Clark and Kingston mountains) or live oaks (New York Mountains) at about 6500 ft (1980 m) to 7000 ft (2135 m) elevation (Garrett and Dunn, 1981). No summer Hepatic Tanager records have come from extensive forests of Jeffrey Pines, white firs (*Abies concolor*) and California black oaks (*Quercus kelloggii*) on the northern slopes of the San Gabriel and San Bernardino Mountains, adjacent to the southern boundary of the WMPA.

Wintering birds in coastal California have mostly been observed in parks and well-planted residential areas with tall pines, eucalyptus, and (often) native coast live oaks (*Quercus agrifolia*). The few winter records for the lower Colorado River Valley have been at sites dominated by planted palms, eucalyptus, tamarisks, and fruiting shrubs (Rosenberg et al., 1991).

The few migrants noted within the WMPA have been in riparian (cottonwood-dominated) woodlands of large oases, such as Big Morongo and the Mojave River at Afton. Many such areas harbor breeding populations of the similar Summer Tanager.

Population Status:

Hepatic Tanagers breed only in small numbers in California; the species' placement on the California Bird Species of Special Concern list (Remsen, 1978) reflects its limited breeding distribution and population size in the state and potential threats from habitat degradation and disturbance.

Breeding populations in California have become established only during the latter half of the present century (Johnson and Garrett, 1974), and possibly only since the late 1960s (Johnson and Garrett, 1974). Grinnell and Miller (1944) did not record this species in the state of California, and careful searching of Clark Mountain (one of only four known breeding sites in the state) in 1939 found no birds (Johnson and Garrett 1974). The expansion of this species' breeding range into California is paralleled by similar expansions into southern Nevada, southern Utah, southern Colorado, and northern New Mexico (Johnson, 1994).

The Breeding Bird Survey (USGS Biological Resources Division) records too few Hepatic Tanagers to develop information on population trends in North America.

Threats Analysis:

Remsen (1978) considered the greatest potential threat to California breeding populations to be habitat destruction, especially through human recreation and forest fires. Increasing human recreation and density in montane woodlands suggests a growing potential for catastrophic fires in Hepatic Tanager habitat as well as for direct disturbance to nesting pairs.

Most of the few transients noted in the WMPA have been observed in cottonwood-willow riparian woodlands at large desert oases such as Big Morongo and the Mojave River at Afton. Maintenance of habitat integrity (well-layered vegetation with tall trees, brushy understory, and available fresh water) in these riparian oases is important for a great many migrant songbirds such as tanagers.

Biological Standards:

Remsen's (1978) recommendation for management of this species in California is to maintain the integrity of breeding habitat by discouraging overnight camping and firearm use in the Arrastre Creek area of the San Bernardino Mountains and to maintain the habitat integrity of desert peak white fir groves. There is no suitable breeding habitat within the WMPA, although such habitat exists nearby, and possibly within the borders of the planning area on the northern slopes of the San Bernardino and San Gabriel Mountains. Records of transients within the WMPA are so few that no generalizations about management needs are possible. As this species is essentially absent from the WMPA, no specific biological standards can be suggested.

Literature Cited:

- American Ornithologists' Union. 1983. Checklist of North American birds, 6th ed. Allen Press, Lawrence, Kansas.
- California Department of Fish and Game, Natural Diversity Data Base. 1998. Special Animals. Biannual publication, Mimeo., 44 pp.
- Garrett, K. and J. Dunn. 1981. Birds of southern California: status and distribution. Los Angeles Audubon Society, Los Angeles, California.
- Grinnell, J. and A.H. Miller. 1944. Distribution of the birds of California. Pacific Coast Avifauna No. 27.
- Huey, L.M. 1961. Two noteworthy records for California. Auk 78:426-427.
- Isler, M.L. and P.R. Isler. 1987. The tanagers: natural history, distribution and identification. Smithsonian Institution Press, Washington D.C.
- Johnson, N.K. 1994. Pioneering and natural expansion of breeding distributions in western North American birds. Stud. Avian Biol. 15:27-44.
- Johnson, N.K. and K.L. Garrett. 1974. Interior bird species expand breeding ranges into southern California. West. Birds 5:45-56.
- Marshall, J.T., Jr. 1957. Birds of pine-oak woodland in southern Arizona and adjacent Mexico. Pacific Coast Avifauna, No. 32.
- Monson, G. and A.R. Phillips. 1981. Annotated checklist of the birds of Arizona, 2nd ed. Univ. of Arizona Press, Tucson, Arizona.
- Remsen, J.V., Jr. 1978. Bird species of special concern in California. California Department of Fish and Game, Wildlife Management Branch Administrative Report No. 78-1.
- Rosenberg, K.V., R.D. Ohmart, W.C. Hunter and B.W. Anderson. 1991. Birds of the lower Colorado River Valley. Univ. of Arizona Press, Tucson, Arizona.
- USDI, Bureau of Land Management, 1997. California Desert District Resource Area files.